Claim Amendments

1 (previously presented): A compound comprising a ligand that specifically reacts with a first receptor not naturally present in mammals, wherein the compound further comprises a molecular cage covalently bound to the ligand that prevents reaction of the ligand with the first receptor, wherein the ligand is released from the cage and capable of reacting with the first receptor upon exposure of the compound to light.

2 (previously presented): The compound of claim 1, wherein the first receptor is an ecdysone receptor.

3 (previously presented): The compound of claim 1, wherein the ligand is a steroid.

4 (previously presented): The compound of claim 1, wherein the ligand is an inhibitor of the first receptor.

5 (previously presented): The compound of claim 2, wherein the ligand is selected from the group consisting of ecdysone, 20-hydroxyecdysone, ponasterone A, muristerone A, inokosterone, *3,5*-di-*tert*-butyl-4-hydroxy-N-isobutyl-benzamide and a dibenzoylhydrazine.

6 (previously presented): The compound of claim 1, wherein the molecular cage is a nitromethoxybenzyl moiety.

7 (previously presented): The compound of claim 6, wherein the nitromethoxybenzyl moiety is 1-methyl-4,5-dimethoxy-2-nitrobenzene.

8 (previously presented): The compound of claim 7, wherein the compound is 4 of FIG. 1.

9-10 (canceled)

11 (previously presented): The compound of claim 1, wherein the molecular cage is a two-photon cage.

12 (previously presented): A cell of a species, wherein the cell is transfected with a gene of interest and a gene encoding a first receptor, the gene of interest operably linked to a genetic element capable of being induced by the first receptor when bound to a ligand, and the first receptor not naturally present in the species,

the cell further comprising a compound comprising the ligand and a molecular cage covalently bound to the ligand that prevents reaction of the ligand with the first receptor, wherein the ligand is released from the cage and capable of reacting with the first receptor upon exposure of the compound to light.

13-14 (canceled)

15 (currently amended): The cell of claim ~~14~~ 12, wherein the cell is part of a living multicellular organism.

16-21 (canceled)

22 (previously presented): The cell of claim 12, wherein the first receptor is an ecdysone receptor.

23-25 (canceled)

26 (previously presented): The cell of claim 12, wherein the gene of interest encodes a Cre recombinase, and wherein the cell further comprises a target sequence flanked by two *loxP* sites, wherein the target sequence is eliminated from the cell when the Cre recombinase is induced.

27-28 (canceled)

29 (previously presented): The cell of claim 26, wherein the target sequence is 3' from a genetic element, such that when the target sequence is eliminated by the Cre recombinase, the genetic element becomes operably linked to a second gene of interest.

30-130 (canceled)

131 (previously presented): A kit for the conditional expression of a gene of interest in a cell, the kit comprising, in suitable containers, the compound of claim 1 and a vector comprising a gene encoding the first receptor.

132 (previously presented): The kit of claim 131, further comprising

a first vector comprising a gene encoding a viral receptor, the viral receptor allowing entry of a viral vector into a cell, and

the viral vector comprising a site for insertion of the gene of interest such that the gene of interest can be expressed when the viral vector infects the cell.

133 (previously presented): The kit of claim 132, wherein the viral receptor is a TVA receptor for subgroup A avian leucosis virus and the viral vector is a subgroup A avian leucosis virus.

134-137 (canceled)

138 (previously presented): A kit for the conditional elimination of a target sequence in a cell, the kit comprising, in suitable containers,

one or more vectors comprising

a gene encoding a recombinase operably linked to a genetic element capable of being induced by a first receptor when bound to a ligand, wherein the first receptor is capable of inducing the genetic element when the first receptor reacts with a ligand;

a gene encoding the first receptor; and

a compound comprising the ligand and a molecular cage covalently bound to the ligand that prevents reaction of the ligand with the first receptor, wherein the ligand is released from the cage and capable of reacting with the first receptor upon exposure of the compound to light.

139 (previously presented): The kit of claim 138, wherein the recombinase is a Cre recombinase.

140 (previously presented): The kit of claim 138, wherein the first receptor is an ecdysone receptor.

141-143 (canceled)